

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of: Annie AUDIERET *et al.*  
Serial No.: 09/779,857  
Filed: February 9, 2001  
Group Art Unit: 1714  
Examiner: P. Szekely

#12  
03/24/03  
PS

For: CEMENT SLURRIES COMPRISING HYDROPHOBIC POLYMERS

**DECLARATION UNDER RULE 37 C.F.R. § 1.132**

Assistant Commissioner for Patents  
Washington D.C. 20231

Sir:

I, Guy Muller, duly warned, declare and say as follows:

THAT, I am a French citizen, residing at 76130 MONT-SAINT-AIGNAN (France);

THAT I graduated in Chemistry ("University of Paris");

THAT I was received as a Doctor by "University of Rouen" (France) in December 1967;

THAT, I was engaged by "Centre National de la Recherche Scientifique" (France) in their Research Department of Polymer Chemistry in 1964; that, from 1964 until now, I have actively and continuously conducted researches in the field of Hydrosoluble Polymers in Solution and at Interfaces.

I declare further:

THAT, I am familiar with the content of U.S. Patent Application Serial No. 09/779,857, filed February 9, 2001;

I declare further:

THAT, I have determined the molecular weights of polymers mentioned throughout the specification of this application by a light scattering method


The light scattering measurements were performed using a multi-angle laser light scattering photometer (MALLS Dawn-F from Wyatt Technology Inc.) coupled on-line with a size exclusion chromatograph (SEC) and a differential refractive index detector (RI). The collected data were analyzed using the Astra v. 4.50 software package.

As is known, the intensity of light scattered is proportionnal to the weight average molar mass  $M_w$  (see for example: P.J. Flory, "Principles of Polymer Chemistry", Cornell University Press, Ithaca, 1953; and C. Tanford "Physical chemistry of Macromolecules", John Wiley and Sons, 1963, Chapter 3 "Statistics of Linear Polymers")

So, I can ascertain that the molecular weights of polymers I have determined are weight average molecular weights.

Anyhow, the typical practice in the art of well fluid additives is to measure the average molecular weight of polymer additives as a weight average. So the persons skilled in the art of well fluid additives, upon reading the specification, would understand, based on the contents of the specification and the typical practice in the art, that the average molecular weight mentioned in the application was the weight average.

I declare further that all statements made herein of my own knowledge are true and that all statements made on information or belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.



Guy Muller

Date: February 27, 2003